

Legal and Social Science Occupations



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Occupations Included in this Reprint

Court reporters
Economists and market and survey researchers
Judges, magistrates, and other judicial workers
Lawyers
Paralegals and legal assistants
Psychologists
Social scientists, other
Urban and regional planners

Court Reporters

(O*NET 23-2091.00)

Significant Points

- Court reporters usually need a 2- or 4- year postsecondary school degree.
- Demand for realtime and broadcast captioning and translating will result in employment growth of court reporters.
- Job opportunities should be best for those with certification from the National Court Reporters Association.

Nature of the Work

Court reporters typically take verbatim reports of speeches, conversations, legal proceedings, meetings, and other events when written accounts of spoken words are necessary for correspondence, records, or legal proof. Court reporters not only play a critical role in judicial proceedings, but every meeting where the spoken word must be preserved as a written transcript. They are responsible for ensuring a complete, accurate, and secure legal record. In addition to preparing and protecting the legal record, many court reporters assist judges and trial attorneys in a variety of ways, such as organizing and searching for information in the official record or making suggestions to judges and attorneys regarding courtroom administration and procedure. Increasingly, court reporters are providing closed-captioning and realtime translating services to the deaf and hard-of-hearing community.

Court reporters document all statements made in official proceedings using a stenotype machine, which allows them to press multiple keys at a time to record combinations of letters representing sounds, words, or phrases. These symbols are then recorded on computer disks or CD-ROM, which are then translated and displayed as text in a process called computer-aided transcription (CAT). In all cases, accuracy is crucial because there is only one person creating an official transcript. In a judicial setting, for example, appeals often depend on the court reporter's transcript.

Stenotype machines used for realtime captioning are linked directly to the computer. As the reporter keys in the symbols, they instantly appear as text on the screen. This process, called Communications Access Realtime Translation (CART), is used in courts, classrooms, meetings, and for closed captioning for the hearing-impaired on television.

Court reporters are responsible for a number of duties both before and after transcribing events. First, they must create and maintain the computer dictionary that they use to translate stenographic strokes into written text. They may customize the dictionary with word parts, words, or terminology specific to the proceeding, program, or event—such as a religious service—they plan to transcribe. After documenting proceedings, court reporters must edit their CART translation for correct grammar, accurate identification of proper names and places, and to ensure the record or testimony is distinguishable. They usually prepare written transcripts, make copies, and provide transcript information to court, counsel, parties, and the public upon request. They also develop procedures for easy storage and retrieval of all stenographic notes and files in paper or digital format.

Although many court reporters record official proceedings in the courtroom, the majority of them work outside the courtroom. Freelance reporters, for example, take depositions for attorneys in offices and document proceedings of meetings, conventions, and other private activities. Others capture the proceedings in government agencies of



Court reporters use stenotype machines to take verbatim reports of speeches, conversations, legal proceedings, meetings, and other events.

all levels, from the U.S. Congress to State and local governing bodies. Court reporters who specialize in captioning live television programming for people with hearing loss are commonly known as *stenocaptioners*. They work for television networks or cable stations captioning news, emergency broadcasts, sporting events, and other programming. With CART and broadcast captioning, the level of understanding gained by a person with hearing loss depends entirely on the skill of the stenocaptioner. In an emergency situation, such as a tornado or hurricane, peoples' safety may depend entirely on the information provided in the form of captioning.

Medical transcriptionists, discussed elsewhere in the *Handbook*, have similar duties, but with a different focus. They translate and edit recorded dictation by physicians and other healthcare providers regarding patient assessment and treatment.

Working Conditions

The majority of court reporters work in comfortable settings, such as in offices of attorneys, courtrooms, legislatures, and conventions. An increasing number of court reporters work from home-based offices as independent contractors.

Work in this occupation presents few hazards, although sitting in the same position for long periods can be tiring, and workers can suffer wrist, back, neck, or eye problems due to strain and risk repetitive motion injuries such as carpal tunnel syndrome. Also, the pressure to be accurate and fast also can be stressful.

Many official court reporters work a standard 40-hour week. Self-employed court reporters usually work flexible hours—including part-time, evenings, weekends, or on an on-call basis.

Employment

Court reporters held about 18,000 jobs in 2000. Of those who worked for a wage or salary, about 11,000 worked for State and local governments, a reflection of the large number of court reporters working in courts, legislatures, and various agencies. Most of the rest worked as independent contractors or employees of court reporting agencies. About 13 percent were self-employed.

Training, Other Qualifications, and Advancement

Court reporters usually complete a 2- or 4-year training program, offered by about 160 postsecondary vocational and technical schools and colleges. Currently, the National Court Reporters Association (NCRA) has approved about 86 programs, all of which offer courses in computer-aided transcription and real-time reporting. NCRA-approved programs require students to capture a minimum of 225 words per minute. Court reporters in the Federal Government must capture at least 225 words a minute.

Some States require court reporters to be Notary Publics, or to be a Certified Court Reporter (CCR); reporters must pass a State certification test administered by a board of examiners to earn this designation. The National Court Reporters Association confers the entry-level designation, Registered Professional Reporter (RPR), upon those who pass a four-part examination and participate in mandatory continuing education programs. Although voluntary, the RPR designation is recognized as a mark of distinction in this field. A reporter may obtain additional certifications that demonstrate higher levels of competency. The NCRA also offers a designation called Certified Realtime Reporter (CRR). This designation promotes and recognizes competence in the specialized skill of converting the spoken word into the written word instantaneously. Reporters, working as stenocaptioners or CART providers, use realtime skills to produce captions for the deaf and hard-of-hearing viewers.

Court reporters must have excellent listening skills, as well as good English grammar and punctuation skills. They must also be aware of business practices and current events, especially the correct spelling of names of people, places, and events that may be mentioned in a broadcast or in court proceedings. For those who work in courtrooms, an expert knowledge of legal terminology and criminal and appellate procedure is essential. Because stenographic capturing of proceedings requires a computerized stenography machine, court reporters must be knowledgeable about computer hardware and software applications.

With experience and education, court reporters can advance to administrative and management positions, consulting, or teaching.

Job Outlook

Employment of court reporters is projected to grow about as fast as the average for all occupations through 2010. Demand for court reporter services will be spurred by the continuing need for accurate transcription of proceedings in courts and in pretrial depositions, and by the growing need to create captions of live or prerecorded television and provide other realtime translating services for the deaf and hard-of-hearing community.

Federal legislation mandates that by 2006, all new television programming must be captioned for the deaf and hard-of-hearing. Additionally, the American with Disabilities Act gives deaf and hard-of-hearing students in colleges and universities the right to request access to realtime translation in their classes. Both of these

factors are expected to increase demand for trained stenographic court reporters to provide realtime captioning and Communications Access Realtime Translation (CART) services. Although these services are transcript-free and differ from traditional court reporting, which uses computer-aided transcription to turn spoken words into permanent text, they require the same skills that court reporters learn in their training.

Despite increasing numbers of civil and criminal cases, budget constraints are expected to limit the ability of Federal, State, and local courts to expand, also limiting the demand for traditional court reporting services in courtrooms and other legal venues. Also, in efforts to keep costs down, many courtrooms have installed tape recorders to maintain records of proceedings. Despite the use of audiotape and videotape technology, court reporters can quickly turn spoken words into readable, searchable, permanent text so they will continue to be needed to produce written legal transcripts and proceedings for publication.

The Internet is expected to affect how reporting services are provided as online video technology improves and more meetings, college classes, and even depositions take place on the Internet. Court reporters will be in demand online to provide instantaneous text of those meetings in a searchable, easy-to-access medium.

Job opportunities should be best for those with certification from the National court Reporters Association.

Earnings

Court reporters had median annual earnings of \$39,660 in 2000. The middle 50 percent earned between \$28,630 and \$51,740. The lowest paid 10 percent earned less than \$18,750, and the highest paid 10 percent earned over \$69,060. Median annual earnings in 2000 were \$37,640 for court reporters working in local government.

Compensation methods for court reporters vary, depending on the type of reporting jobs, the experience of the individual reporter, the level of certification achieved and the region. Official court reporters earn a salary and a per-page fee for transcripts. Many salaried court reporters supplement their income by doing additional freelance work. Freelance court reporters are paid per job and receive a per-page fee for transcripts. Communication access realtime translation providers are paid hourly. Stenocaptioners are paid a salary and benefits if they work as employees of a captioning company; stenocaptioners working as independent contractors are paid hourly.

According to a National Court Reporters Association survey of its members, average annual earnings for court reporters were \$61,830 in 1999.

Related Occupations

A number of other workers type, record information, and process paperwork. Among these are secretaries and administrative assistants, medical transcriptionists, receptionists and information clerks, and human resources assistants, except payroll and timekeeping. Other workers who provide legal support include paralegals and legal assistants.

Sources of Additional Information

State employment service offices can provide information about job openings for court reporters. For information about careers, training, and certification in court reporting, contact:

► National Court Reporters Association, 8224 Old Courthouse Rd., Vienna, VA 22182. Internet: <http://www.ncraonline.org> and <http://www.bestfuture.com>

► United States Court Reporters Association, P.O. Box 465, Chicago, IL, 60690-0465. Internet: <http://www.uscra.org>

Economists and Market and Survey Researchers

(O*NET 19-3011.00, 19-3021.00, 19-3022.00)

Significant Points

- Demand for qualified market and survey researchers should be strong.
- Candidates who hold an advanced degree will have the best employment prospects and advancement opportunities.

Nature of the Work

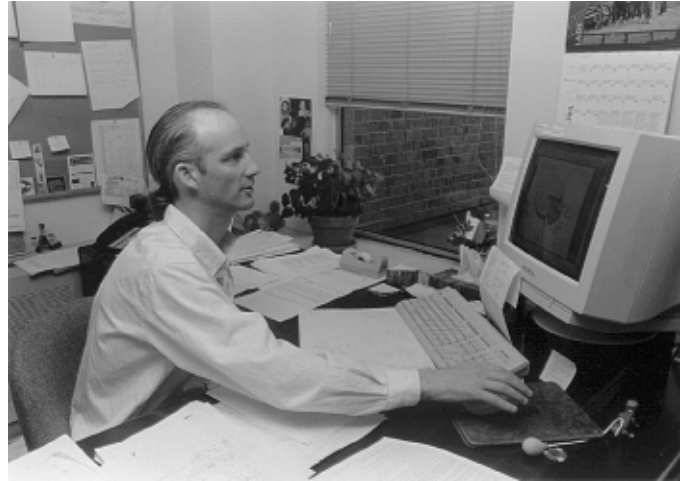
Economists. Economists study how society distributes scarce resources such as land, labor, raw materials, and machinery to produce goods and services. They conduct research, collect and analyze data, monitor economic trends, and develop forecasts. They research issues such as energy costs, inflation, interest rates, imports, or employment levels.

Most economists are concerned with practical applications of economic policy. They use their understanding of economic relationships to advise businesses and other organizations, including insurance companies, banks, securities firms, industry and trade associations, labor unions, and government agencies. Economists use mathematical models to help predict answers to questions such as the nature and length of business cycles, the effects of a specific rate of inflation on the economy, or the effects of tax legislation on unemployment levels.

Economists devise methods and procedures for obtaining the data they need. For example, sampling techniques may be used to conduct a survey, and various mathematical modeling techniques may be used to develop forecasts. Preparing reports, including tables and charts, on research results is an important part of an economist's job. Presenting economic and statistical concepts in a clear and meaningful way is particularly important for economists whose research is directed toward making policies for an organization.

Economists who work for government agencies may assess economic conditions in the United States or abroad, in order to estimate the economic effects of specific changes in legislation or public policy. They may study areas such as how the dollar's fluctuation against foreign currencies affects import and export levels. The majority of government economists work in the area of agriculture, labor, or quantitative analysis; however, economists work in almost every area of government. For example, economists in the U.S. Department of Commerce study production, distribution, and consumption of commodities produced overseas, while economists employed with the U.S. Bureau of Labor Statistics analyze data on the domestic economy such as prices, wages, employment, productivity, and safety and health. An economist working in State or local government might analyze data on the growth of school-aged populations, prison growth, and employment and unemployment rates, in order to project future spending needs.

Market Research Analysts. Market, or marketing, research analysts are concerned with the potential sales of a product or service. They analyze statistical data on past sales to predict future sales. They gather data on competitors and analyze prices, sales, and methods of marketing and distribution. Like economists, market research analysts devise methods and procedures for obtaining the data they need. They often design telephone, personal, or mail interview surveys to assess consumer preferences. Trained interviewers, under the market research analyst's direction, usually conduct the surveys.



Preparing reports, including tables and charts, on research results is an important part of the job for economists and market and survey researchers.

After compiling the data, market research analysts evaluate it and make recommendations to their client or employer based upon their findings. They provide a company's management with information needed to make decisions on the promotion, distribution, design, and pricing of products or services. The information may also be used to determine the advisability of adding new lines of merchandise, opening new branches, or otherwise diversifying the company's operations. Analysts may conduct opinion research to determine public attitudes on various issues, which may help political or business leaders and others assess public support for their electoral prospects or advertising policies.

Survey Researchers. Survey researchers design and conduct surveys. They use surveys to collect information that is used for research, making fiscal or policy decisions, and measuring policy effectiveness, for example. As with market research analysts, survey researchers may use a variety of mediums to conduct surveys, such as the Internet, personal or telephone interviews, or mail questionnaires. They also may supervise interviewers who conduct surveys in person or over the telephone.

Survey researchers design surveys in many different formats, depending upon the scope of research and method of collection. Interview surveys, for example, are common because they can increase survey participation rates. Survey researchers may consult with economists, statisticians, market research analysts, or other data users in order to design surveys. They also may present survey results to clients.

Working Conditions

Economists and market and survey researchers have structured work schedules. They often work alone, writing reports, preparing statistical charts, and using computers, but they also may be an integral part of a research team. Most work under pressure of deadlines and tight schedules, which may require overtime. Their routine may be interrupted by special requests for data, as well as by the need to attend meetings or conferences. Frequent travel may be necessary.

Employment

Economists and market and survey researchers held about 134,000 jobs in 2000. Private industry provided about 9 out of 10 jobs for salaried workers, particularly economic and marketing research firms, management consulting firms, banks, securities and commodities brokers, and computer and data processing companies. A wide

range of government agencies provided the remaining jobs, primarily for economists. The U.S. Departments of Labor, Agriculture, and Commerce are the largest Federal employers of economists. A number of economists and market and survey researchers combine a full-time job in government, academia, or business with part-time or consulting work in another setting.

Employment of economists and market and survey researchers is concentrated in large cities. Some work abroad for companies with major international operations, for U.S. Government agencies, and for international organizations like the World Bank and the United Nations.

Besides the jobs described above, many economists and market and survey researchers held faculty positions in colleges and universities. Economics and marketing faculties have flexible work schedules, and may divide their time among teaching, research, consulting, and administration. (See the statement on teachers—postsecondary elsewhere in the *Handbook*.)

Training, Other Qualifications, and Advancement

Graduate education is required for many private sector economist and market and survey research jobs, and for advancement to more responsible positions. Economics includes many specialties at the graduate level, such as advanced economic theory, econometrics, international economics, and labor economics. Students should select graduate schools strong in specialties in which they are interested. Undergraduate economics majors can choose from a variety of courses, ranging from microeconomics, macroeconomics, and econometrics, to more philosophical courses, such as the history of economic thought.

In the Federal Government, candidates for entry-level economist positions must have a bachelor's degree with a minimum of 21 semester hours of economics and 3 hours of statistics, accounting, or calculus.

Market and survey researchers may earn advanced degrees in economics, business administration, marketing, statistics, or some closely related discipline. Some schools help graduate students find internships or part-time employment in government agencies, economic consulting firms, financial institutions, or marketing research firms prior to graduation.

In addition to courses in business, marketing, and consumer behavior, marketing majors should take other liberal arts and social science courses, including economics, psychology, English, and sociology. Because of the importance of quantitative skills to economists and market and survey researchers, courses in mathematics, statistics, econometrics, sampling theory and survey design, and computer science are extremely helpful.

Whether working in government, industry, research organizations, marketing, or consulting firms, economists and market and survey researchers with bachelor degrees usually qualify for most entry-level positions as a research assistant, administrative or management trainee, marketing interviewer, or any of a number of professional sales jobs. A master's degree usually is required to qualify for more responsible research and administrative positions. Many businesses, research and consulting firms, and government agencies seek individuals who have strong computer and quantitative skills and can perform complex research. A Ph.D. is necessary for top economist or marketing positions in many organizations. Many corporation and government executives have a strong background in economics or marketing.

A master's degree is usually the minimum requirement for a job as an instructor in junior and community colleges. In most colleges and universities, however, a Ph.D. is necessary for appointment as an instructor. A Ph.D. and extensive publications in academic journals are required for a professorship, tenure, and promotion.

Aspiring economists and market and survey researchers should gain experience gathering and analyzing data, conducting interviews or surveys, and writing reports on their findings while in college. This experience can prove invaluable later in obtaining a full-time position in the field, since much of their work, in the beginning, may center on these duties. With experience, economists and market and survey researchers eventually are assigned their own research projects.

Those considering careers as economists or market and survey researchers should be able to pay attention to details because much time is spent on precise data analysis. Patience and persistence are necessary qualities since economists and market and survey researchers must spend long hours on independent study and problem solving. At the same time, they must work well with others, especially market and survey researchers, who often oversee interviews for a wide variety of individuals. Economists and market and survey researchers must be able to present their findings, both orally and in writing, in a clear, concise manner.

Job Outlook

Employment of economists and market and survey researchers is expected to grow faster than the average for all occupations through 2010. Many job openings are likely to result from the need to replace experienced workers who transfer to other occupations, retire, or leave the labor force for other reasons. Employment growth of economists is expected to be as fast as average over the projection period, while growth for market research analysts and survey researchers is expected to be faster than average.

Opportunities for economists should be best in private industry, especially in research, testing, and consulting firms, as more companies contract out for economic research services. The growing complexity of the global economy, competition, and increased reliance on quantitative methods for analyzing the current value of future funds, business trends, sales, and purchasing should spur demand for economists. The growing need for economic analyses in virtually every industry should result in additional jobs for economists. Employment of economists in the Federal Government should decline more slowly than other occupations in the Federal workforce. Slow employment growth is expected among economists in State and local government.

Candidates who meet State certification requirements may become high school economics teachers. The demand for secondary school economics teachers is expected to grow, as economics becomes an increasingly important and popular course. (See the statement on teachers—preschool, kindergarten, elementary, middle, and secondary elsewhere in the *Handbook*.)

Demand for qualified market research analysts should be healthy because of an increasingly competitive economy. Marketing research provides organizations valuable feedback from purchasers, allowing companies to evaluate consumer satisfaction and more effectively plan for the future. As companies seek to expand their market and consumers become better informed, the need for marketing professionals will increase.

Opportunities for market research analysts with graduate degrees should be good in a wide range of employment settings, particularly in marketing research firms, as companies find it more profitable to contract out for marketing research services rather than support their own marketing department. Other organizations, including financial services organizations, healthcare institutions, advertising firms, manufacturing firms producing consumer goods, and insurance companies may offer job opportunities for market research analysts.

Opportunities for survey researchers should be strong as the demand for market and opinion research increase. Employment

opportunities will be especially favorable in commercial market and opinion research as an increasingly competitive economy requires businesses to more effectively and efficiently allocate advertising funds.

An advanced degree coupled with a strong background in economic theory, mathematics, statistics, and econometrics provides the basis for acquiring any specialty within the economics and market and survey research field. Those skilled in quantitative techniques and their application to economic modeling and forecasting, coupled with good communications skills, should have the best job opportunities.

Bachelor's degree holders may face competition for the limited number of positions for which they qualify. They will qualify for a number of other positions, however, where they can take advantage of their economic knowledge in conducting research, developing surveys, or analyzing data. Many graduates with bachelor's degrees will find good jobs in industry and business as management or sales trainees, or administrative assistants. Bachelor's degree holders with good quantitative skills and a strong background in mathematics, statistics, survey design, and computer science also may be hired by private firms as research assistants or interviewers.

Ph.D. degree holders in economics and marketing should have good opportunities in most areas such as industry and consulting firms. However, Ph.D. holders are likely to face keen competition for tenured teaching positions in colleges and universities.

Earnings

Median annual earnings of economists were \$64,830 in 2000. The middle 50 percent earned between \$47,370 and \$87,890. The lowest 10 percent earned less than \$35,690, and the highest 10 percent earned more than \$114,580.

The Federal Government recognizes education and experience in certifying applicants for entry-level positions. The entrance salary for economists having a bachelor's degree was about \$21,900 a year in 2001; however, those with superior academic records could begin at \$27,200. Those having a master's degree could qualify for positions at an annual salary of \$33,300. Those with a Ph.D. could begin at \$40,200, while some individuals with experience and an advanced degree could start at \$48,200. Starting salaries were slightly higher in selected areas where the prevailing local pay was higher. The average annual salary for economists employed by the Federal Government was \$74,090 a year in 2001.

Median annual earnings of market research analysts in 2000 were \$51,190. The middle 50 percent earned between \$37,030 and \$71,660. The lowest 10 percent earned less than \$27,570, and the highest 10 percent earned more than \$96,360. Median annual earnings in the industries employing the largest numbers of market research analysts in 2000 were as follows:

Computer and data processing services	\$61,320
Management and public relations	44,580
Research and testing services	43,660

Median annual earnings of survey researchers in 2000 were \$26,200. The middle 50 percent earned between \$17,330 and \$47,820. The lowest 10 percent earned less than \$15,050, and the highest 10 percent earned more than \$71,790. Median annual earnings of survey researchers in 2000 were \$52,470 in computer and data processing services and \$18,780 in research and testing services.

Related Occupations

Economists are concerned with understanding and interpreting financial matters, among other subjects. Other jobs in this area include actuaries; budget analysts; financial analysts and personal financial advisors; financial managers; insurance underwriters; loan

counselors and officers; and purchasing managers, buyers, and purchasing agents.

Market research analysts do research to find out how well the market receives products or services. This may include planning, implementation, and analysis of surveys to determine people's needs and preferences. Other jobs using these skills include psychologists, sociologists, and urban and regional planners.

Sources of Additional Information

For information on careers in business economics, contact:
➤ National Association for Business Economics, 1233 20th St. NW., Suite 505, Washington, DC 20036. Internet: <http://www.nabe.com>

For information about careers and salaries in market and survey research, contact:

- Marketing Research Association, 1344 Silas Deane Hwy., Suite 306, Rocky Hill, CT 06067-0230. Internet: <http://www.mra-net.org>
- Council of American Survey Research Organizations, 3 Upper Devon, Port Jefferson, NY 11777. Internet: <http://www.casro.org>

Information on obtaining a position as an economist with the Federal Government is available from the Office of Personnel Management (OPM) through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000; Federal Relay Service: (800) 877-8339. The first number is not tollfree, and charges may result. Information also is available from the OPM Internet site:

<http://www.usajobs.opm.gov>.

Judges, Magistrates, and Other Judicial Workers

(O*NET 23-1021.00, 23-1022.00, 23-1023.00)

Significant Points

- A bachelor's degree and work experience are the minimum requirements for a judgeship or magistrate position; however, most workers filling these positions also have law degrees.
- Judges and magistrates should encounter competition for jobs.
- Demand for arbitrators, mediators, and conciliators is growing because of the high cost and long delays associated with litigation.

Nature of the Work

Judges, magistrates, and other judicial workers apply the law and oversee the legal process in courts according to local, State, and Federal statutes. They preside over cases concerning every aspect of society, from traffic offenses to disputes over management of professional sports, or from the rights of huge corporations to questions of disconnecting life support equipment for terminally ill persons. All judicial workers must ensure that trials and hearings are conducted fairly and that the court administers justice in a manner which safeguards the legal rights of all parties involved.

The most visible responsibility of judges is presiding over trials or hearings and listening as attorneys represent the parties present. They rule on the admissibility of evidence and the methods of conducting testimony, and they may be called upon to settle disputes between opposing attorneys. Also, they ensure that rules and procedures are followed, and if unusual circumstances arise for which standard procedures have not been established, they determine the manner in which the trial will proceed based on their interpretation of the law.

Judges often hold pretrial hearings for cases. They listen to allegations and determine whether the evidence presented merits a trial. In criminal cases, judges may decide that persons charged with crimes should be held in jail pending their trial, or they may set conditions for release. In civil cases, they occasionally impose restrictions upon the parties until a trial is held.

In many trials, juries are selected to decide guilt or innocence in criminal cases or liability and compensation in civil cases. Judges instruct juries on applicable laws, direct them to deduce the facts from the evidence presented, and hear their verdict. When the law does not require a jury trial or when the parties waive their right to a jury, judges decide the cases. In such cases, the judge determines guilt and imposes sentences in a criminal case; in civil cases, the judge awards relief—such as compensation for damages—to the parties in the lawsuit (also called litigants). Judges also work outside the courtroom, “in chambers.” In these, their private offices, judges read documents on pleadings and motions, research legal issues, write opinions, and oversee the court’s operations. In some jurisdictions, judges also manage the courts’ administrative and clerical staff.

Judges’ duties vary according to the extent of their jurisdictions and powers. *General trial court judges* of the Federal and State court systems have jurisdiction over any case in their system. They usually try civil cases transcending the jurisdiction of lower courts and all cases involving felony offenses. Federal and State *appellate court judges*, although few in number, have the power to overrule decisions made by trial court or administrative law judges if they determine that legal errors were made in a case or if legal precedent does not support the judgment of the lower court. They rule on a small number of cases and rarely have direct contacts with litigants. Instead, they usually base their decisions on lower court records and lawyers’ written and oral arguments.

Many State court judges preside in courts in which jurisdiction is limited by law to certain types of cases. A variety of titles are assigned to these judges, but among the most common are *municipal court judge*, *county court judge*, *magistrate*, or *justice of the peace*. Traffic violations, misdemeanors, small claims cases, and pretrial hearings constitute the bulk of the work of these judges, but some States allow them to handle cases involving domestic relations, probate, contracts, and other selected areas of the law.

Administrative law judges, sometimes called *hearing officers* or *adjudicators*, are employed by government agencies to make determinations for administrative agencies. They make decisions on a person’s eligibility for various Social Security benefits or worker’s compensation, protection of the environment, enforcement of health and safety regulations, employment discrimination, and compliance with economic regulatory requirements.

Arbitration, mediation, and conciliation—Appropriate Dispute Resolution (ADR)—are alternative processes that can be used to settle disputes between parties. All ADR hearings are private and confidential, and the processes are less formal than a court trial. If no settlement is reached using ADR, any statements made during the proceedings are inadmissible as evidence in any subsequent litigation.

During arbitration, opposing parties submit their dispute to one or more impartial persons, called arbitrators, for a final and binding decision. Arbitrators usually are attorneys or businesspersons with expertise in a particular field. The parties identify beforehand the issues to be resolved by arbitration, the scope of the relief to be awarded, and many of the procedural aspects of the process. Few awards are reviewed by the courts because the parties have agreed to be bound by the decision of their arbitrator, although in some cases, it is prearranged that the award will only be advisory. Mediation involves an attempt by the parties to resolve their dispute with the aid of a neutral third party, and generally is used when the parties



The most visible responsibility of judges is presiding over trials or hearings and listening as attorneys represent their clients.

wish to preserve their relationship. A mediator may offer suggestions, but resolution of the dispute rests with the parties themselves. Mediation proceedings are also confidential and private. If the parties can’t reach a settlement, they are free to pursue other options. The parties usually decide in advance how they will contribute to the cost of mediation.

Conciliation is similar to mediation. The conciliator’s role is to guide the parties to a settlement. The parties must decide in advance whether they will be bound by the conciliator’s recommendations for settlement. The parties generally share equally in the cost of the conciliation.

Working Conditions

Judges, magistrates, and other judicial workers do most of their work in offices, law libraries, and courtrooms. Work in these occupations presents few hazards, although sitting in the same position for long periods of time while in the courtroom can be tiring. Most judges work a standard 40-hour week, but many work over 50 hours per week. Some judges with limited jurisdiction are employed part time and divide their time between their judicial responsibilities and other careers.

Arbitrators, mediators, and conciliators usually work in private offices or meeting rooms; no public record is made of the proceedings.

Employment

Judges, magistrates, and other judicial workers held 43,000 jobs in 2000, primarily in State and local government. Of these, administrative law judges, adjudicators, and hearing officers held about 14,000 jobs; about two-thirds worked in State governments, one-fourth in the Federal Government, and the remainder in local governments. Arbitrators, mediators, and conciliators held another 4,400 jobs, mostly in legal services and State and local governments, although a small number worked in labor organizations.

Training, Other Qualifications, and Advancement

A bachelor’s degree and work experience are usually the minimum requirement for a judgeship or magistrate position. A number of lawyers become judges, and most judges have first been lawyers. In fact, Federal and State judges usually are required to be lawyers. About 40 States allow nonlawyers to hold limited jurisdiction judgeships, but opportunities are better for those with law experience. Federal administrative law judges must be lawyers and pass a competitive examination administered by the U.S. Office of Personnel

Management. Some State administrative law judges and other hearing officials are not required to be lawyers.

Federal administrative law judges are appointed by various Federal agencies, with virtually lifetime tenure. Federal magistrate judges are appointed by district judges—the life-tenured Federal judges of a district court—to serve in a United States district court for a period of eight years. Some State judges are appointed, and the remainder are elected in partisan or nonpartisan State elections. Many State and local judges serve fixed renewable terms, which range from 4 or 6 years for some trial court judgeships to as long as 14 years or life for other trial or appellate court judges. Judicial nominating commissions, composed of members of the bar and the public, are used to screen candidates for judgeships in many States and for some Federal judgeships.

All States have some type of orientation for newly elected or appointed judges. The Federal Judicial Center, American Bar Association, National Judicial College, and National Center for State Courts provide judicial education and training for judges and other judicial branch personnel. General and continuing education courses usually last from a couple of days to 3 weeks in length. More than half of all States, as well as Puerto Rico, require judges to enroll in continuing education courses while serving on the bench.

Training and education requirements for arbitrators, mediators, and conciliators differ from those of judges. Mediators who practice in State- or court-funded mediation programs usually must meet specific training or experience standards, which vary by State and court. In most States, individuals who offer private mediation services do not need a license, certification, or specific coursework. In reality, however, many private mediators and most of those affiliated with mediation organizations and programs have completed mediation training and agreed to comply with certain ethical standards. For example, the American Arbitration Association (AAA) requires mediators listed on its mediation panel to complete an AAA training course, receive recommendations from the trainers, and successfully complete an apprenticeship.

Training for arbitrators, mediators, and conciliators is available through independent mediation programs, national and local mediation membership organizations, and postsecondary schools. In 1998, 13 colleges or universities in the United States offered master's degrees in dispute resolution or conflict management, and 2 offered doctoral degrees. Many more schools offer conflict-management specializations within other degree programs. Degrees in public policy, law, and related fields also provide good background for prospective arbitrators, mediators, and conciliators.

Job Outlook

Employment of judges and magistrates is expected to grow more slowly than the average through 2010. As in the past, most job openings will arise as judges retire.

Contradictory social forces affect the demand for judges. Growing public concerns about crime, safety, and efficient administration of justice should spur demand, while public budgetary pressures will limit job growth. Caseload filings—a good indicator of the demand for the services of judges—are steadily increasing in both the Federal and State court systems. Not only has the quantity of work increased, but many cases have become more complex because of developments in information technology, medical science, e-commerce and globalization. The prestige associated with serving on the bench should ensure competition for judges and magistrates. Becoming a judge will be difficult because not only must judicial candidates compete with other qualified people, they often must also gain political support in order to be elected or appointed.

Employment of arbitrators, mediators, and conciliators is expected to grow faster than the average for all occupations through

2010. Many people try to avoid litigation, which can involve lengthy delays, high costs, unwanted publicity, and ill will. Arbitration and other alternative processes to litigation usually are faster, less expensive, and more conclusive, spurring demand for the services of arbitrators, mediators, and conciliators.

Earnings

Judges, magistrate judges, and magistrates had median annual earnings of \$86,760 in 2000. The middle 50 percent earned between \$42,780 and \$113,410. The top 10 percent earned more than \$134,660, while the bottom 10 percent earned less than \$19,320. Administrative law judges, adjudicators, and hearing officers earned a median of \$61,240, and arbitrators, mediators, and conciliators earned a median of \$43,060. Median annual earnings in the industries employing the largest numbers of judges, magistrate judges, and magistrates in 2000 were as follows:

State government	\$104,560
Local government	50,150

According to the Administrative Office of the U.S. Courts, the Chief Justice of the United States Supreme Court earned \$186,300, and the Associate Justices earned \$178,300. Federal district court judges had salaries of \$145,100 in 2001, as did judges in the Court of Federal Claims and the Court of International Trade; court of appeals judges earned \$153,900 a year. Federal judges with limited jurisdiction, such as magistrates and bankruptcy court judges, had salaries of \$133,500.

According to a survey by the National Center for State Courts, annual salaries of associate justices of States' highest courts averaged \$116,200 in 2000, and ranged from about \$85,550 to \$153,100. Salaries of State intermediate appellate court judges averaged \$114,280, and ranged from \$86,000 to \$147,000. Salaries of State judges of general jurisdiction trial courts averaged \$104,400, and ranged from \$77,500 to \$136,700.

Most salaried judges are provided health and life insurance, and contributions are made on their behalf to retirement plans.

Related Occupations

Legal training and mediation skills are useful in many other occupations. Some of these are counselors; lawyers; paralegals and legal assistants; title examiners, abstractors, and searchers; law clerks; and detectives and criminal investigators.

Sources of Additional Information

Information on judges, magistrates, and other judicial workers may be obtained from:

- National Center for State Courts, 300 Newport Ave., Williamsburg, VA 23185. Internet: <http://www.ncsconline.org>

Information on arbitrators, mediators, and conciliators may be obtained from:

- American Arbitration Association, 335 Madison Ave., Floor 10, New York, NY 10017. Internet: <http://www.adr.org>

Lawyers

(O*NET 23-1011.00)

Significant Points

- Formal educational requirements for lawyers include a 4-year college degree, 3 years in law school, and successful completion of a written bar examination.
- Competition for admission to most law schools is intense.

Nature of the Work

The legal system affects nearly every aspect of our society, from buying a home to crossing the street. Lawyers form the backbone of this vital system, linking it to society in myriad ways. For this reason, they hold positions of great responsibility and are obligated to adhere to a strict code of ethics.

Lawyers, also called *attorneys*, act both as advocates and advisors in our society. As advocates, they represent one of the parties in criminal and civil trials by presenting evidence and arguing in court to support their client. As advisors, lawyers counsel their clients concerning their legal rights and obligations, and suggest particular courses of action in business and personal matters. Whether acting as an advocate or advisor, all attorneys research the intent of laws and judicial decisions and apply the law to the specific circumstances faced by their client.

The more detailed aspects of a lawyer's job depend upon his or her field of specialization and position. While all lawyers are licensed to represent parties in court, some appear in court more frequently than others. Trial lawyers, who specialize in trial work, must be able to think quickly and speak with ease and authority. In addition, familiarity with courtroom rules and strategy are particularly important in trial work. Still, trial lawyers spend the majority of their time outside the courtroom conducting research, interviewing clients and witnesses, and handling other details in preparation for trial.

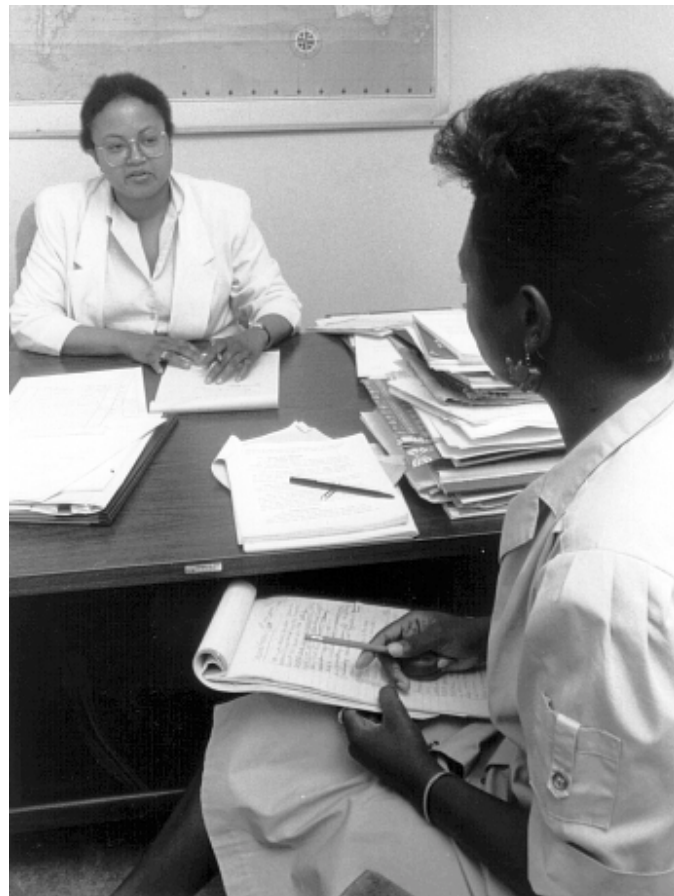
Lawyers may specialize in a number of different areas, such as bankruptcy, probate, international, or elder law. Those specializing in environmental law, for example, may represent public interest groups, waste disposal companies, or construction firms in their dealings with the U.S. Environmental Protection Agency (EPA) and other Federal and State agencies. They help clients prepare and file for licenses and applications for approval before certain activities may occur. In addition, they represent clients' interests in administrative adjudications.

Some lawyers concentrate in the growing field of intellectual property. These lawyers help protect clients' claims to copyrights, art work under contract, product designs, and computer programs. Still other lawyers advise insurance companies about the legality of insurance transactions. They write insurance policies to conform with the law and to protect companies from unwarranted claims. When claims are filed against insurance companies, they review the claims and represent the companies in court.

The majority of lawyers are found in private practice, where they concentrate on criminal or civil law. In criminal law, lawyers represent individuals who have been charged with crimes and argue their cases in courts of law. Attorneys dealing with civil law assist clients with litigation, wills, trusts, contracts, mortgages, titles, and leases. Other lawyers handle only public interest cases—civil or criminal—which may have an impact extending well beyond the individual client.

Lawyers are sometimes employed full time by a single client. If the client is a corporation, the lawyer is known as "house counsel," and usually advises the company concerning legal issues related to its business activities. These issues might involve patents, government regulations, contracts with other companies, property interests, or collective bargaining agreements with unions.

A significant number of attorneys are employed at the various levels of government. Lawyers who work for State attorneys general, prosecutors, public defenders, and courts play a key role in the criminal justice system. At the Federal level, attorneys investigate cases for the U.S. Department of Justice and other agencies. Government lawyers also help develop programs, draft and interpret laws and legislation, establish enforcement procedures, and argue civil and criminal cases on behalf of the government.



Lawyers counsel their clients concerning their legal rights and obligations, and suggest particular courses of action in business and personal matters.

Other lawyers work for legal-aid societies—private, nonprofit organizations established to serve disadvantaged people. These lawyers generally handle civil, rather than criminal, cases. A relatively small number of trained attorneys work in law schools. Most are faculty members who specialize in one or more subjects; however, some serve as administrators. Others work full time in non-academic settings and teach part time. (For additional information, see the *Handbook* section on postsecondary teachers.)

Lawyers increasingly use various forms of technology to perform their varied tasks more efficiently. While all lawyers continue to use law libraries to prepare cases, some supplement their search of conventional printed sources with computer sources, such as the Internet and legal databases. Software is used to search this legal literature automatically and to identify legal texts relevant to a specific case. In litigation involving many supporting documents, lawyers may use computers to organize and index material. Lawyers also use electronic filing, videoconferencing, and voice-recognition technology to more effectively share information with other parties involved in a case.

Working Conditions

Lawyers do most of their work in offices, law libraries, and courtrooms. They sometimes meet in clients' homes or places of business and, when necessary, in hospitals or prisons. They may travel to attend meetings, gather evidence, and appear before courts, legislative bodies, and other authorities.

Salaried lawyers usually have structured work schedules. Lawyers in private practice may work irregular hours while conducting

research, conferring with clients, or preparing briefs during nonoffice hours. Lawyers often work long hours, and about half regularly work 40 hours or more per week. They may face particularly heavy pressure, especially when a case is being tried. Preparation for court includes keeping abreast of the latest laws and judicial decisions.

Although legal work generally is not seasonal, the work of tax lawyers and other specialists may be an exception. Because lawyers in private practice often can determine their own workload and time at which they will retire, many stay in practice well beyond the usual retirement age.

Employment

Lawyers held about 681,000 jobs in 2000. About 3 out of 4 lawyers practiced privately, either in law firms or in solo practices. Most of the remaining lawyers held positions in government, the greatest number at the local level. In the Federal Government, lawyers work for many different agencies but are concentrated in the Departments of Justice, Treasury, and Defense. A small number of lawyers are employed as house counsel by public utilities, banks, insurance companies, real estate agencies, manufacturing firms, welfare and religious organizations, and other business firms and nonprofit organizations. Some salaried lawyers also have part-time independent practices; others work as lawyers part time while working full time in another occupation.

Training, Other Qualifications, and Advancement

To practice law in the courts of any State or other jurisdiction, a person must be licensed, or admitted to its bar, under rules established by the jurisdiction's highest court. All States require that applicants for admission to the bar pass a written bar examination; most jurisdictions also require applicants to pass a separate written ethics examination. Lawyers who have been admitted to the bar in one jurisdiction occasionally may be admitted to the bar in another without taking an examination, if they meet the latter jurisdiction's standards of good moral character and have a specified period of legal experience. Federal courts and agencies set their own qualifications for those practicing before them.

To qualify for the bar examination in most States, an applicant usually must obtain a college degree and graduate from a law school accredited by the American Bar Association (ABA) or the proper State authorities. ABA accreditation signifies that the law school—particularly its library and faculty—meets certain standards developed to promote quality legal education. ABA currently accredits 185 law schools; others are approved by State authorities only. With certain exceptions, graduates of schools not approved by the ABA are restricted to taking the bar examination and practicing in the State or other jurisdiction in which the school is located; most of these schools are in California. In 2000, six States accepted the study of law in a law office as qualification for taking the bar examination; only California accepts the study of law by correspondence. Several States require registration and approval of students by the State Board of Law Examiners, either before the students enter law school or during the early years of legal study.

Although there is no nationwide bar examination, 48 States, the District of Columbia, Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands require the 6-hour Multistate Bar Examination (MBE) as part of the bar examination; the MBE is not required in Louisiana and Washington. The MBE covers issues of broad interest and is sometimes given in addition to a locally prepared State bar examination. The 3-hour Multistate Essay Examination (MEE) is used as part of the State bar examination in several States. States vary in their use of MBE and MEE scores.

Many states have begun to require Multistate Performance Testing (MPT) to test the practical skills of beginning lawyers. This

program has been well received, and many more States are expected to require performance testing in the future. Requirements vary by State, although the test usually is taken at the same time as the bar exam and is a one-time requirement.

The required college and law school education usually takes 7 years of full-time study after high school—4 years of undergraduate study followed by 3 years of law school. Law school applicants must have a bachelor's degree to qualify for admission. To meet the needs of students who can attend only part time, a number of law schools have night or part-time divisions, which usually require 4 years of study; about 1 in 10 graduates from ABA-approved schools attends part time.

Although there is no recommended "prelaw" major, prospective lawyers should develop proficiency in writing and speaking, reading, researching, analyzing, and thinking logically—skills needed to succeed both in law school and in the profession. Regardless of major, a multidisciplinary background is recommended. Courses in English, foreign languages, public speaking, government, philosophy, history, economics, mathematics, and computer science, among others, are useful. Students interested in a particular aspect of law may find related courses helpful. For example, prospective patent lawyers need a strong background in engineering or science, and future tax lawyers must have extensive knowledge of accounting.

Acceptance by most law schools depends on the applicant's ability to demonstrate an aptitude for the study of law, usually through good undergraduate grades, the Law School Admission Test (LSAT), the quality of the applicant's undergraduate school, any prior work experience, and, sometimes, a personal interview. However, law schools vary in the weight they place on each of these and other factors.

All law schools approved by the ABA, except for those in Puerto Rico, require applicants to take the LSAT. Nearly all law schools require applicants to have certified transcripts sent to the Law School Data Assembly Service, which then sends applicants' LSAT scores and their standardized records of college grades to the law schools of their choice. Both this service and the LSAT are administered by the Law School Admission Council.

Competition for admission to many law schools is intense, especially for the most prestigious schools. Enrollments in these schools rose very rapidly during the 1970s, as applicants far outnumbered available seats. Although the overall number of law school applicants decreased markedly in the 1990s, the number of applicants to most law schools still greatly exceeds the number that can be admitted.

During the first year or year-and-a-half of law school, students usually study core courses such as constitutional law, contracts, property law, torts, civil procedure, and legal writing. In the remaining time, they may elect specialized courses in fields such as tax, labor, or corporate law. Law students often acquire practical experience by participation in school-sponsored legal clinic activities; in the school's moot court competitions, in which students conduct appellate arguments; in practice trials under the supervision of experienced lawyers and judges; and through research and writing on legal issues for the school's law journal.

A number of law schools have clinical programs in which students gain legal experience through practice trials and projects under the supervision of practicing lawyers and law school faculty. Law school clinical programs might include work in legal aid clinics, for example, or on the staff of legislative committees. Part-time or summer clerkships in law firms, government agencies, and corporate legal departments also provide valuable experience. Such training can lead directly to a job after graduation and can help students decide what kind of practice best suits them. Clerkships may also be an important source of financial aid.

In 1999, law students in 52 jurisdictions were required to pass the Multistate Professional Responsibility Examination (MPRE), which

tests their knowledge of the ABA codes on professional responsibility and judicial conduct. In some States, the MPRE may be taken during law school, usually after completing a course on legal ethics.

Law school graduates receive the degree of *juris doctor* (J.D.) as the first professional degree. Advanced law degrees may be desirable for those planning to specialize, research, or teach. Some law students pursue joint degree programs, which usually require an additional semester or year. Joint degree programs are offered in a number of areas, including law and business administration or public administration.

After graduation, lawyers must keep informed about legal and nonlegal developments that affect their practice. Currently, 39 States and jurisdictions mandate Continuing Legal Education (CLE). Many law schools and State and local bar associations provide continuing education courses that help lawyers stay abreast of recent developments. Some States allow CLE credits to be obtained through participation in seminars on the Internet.

The practice of law involves a great deal of responsibility. Individuals planning careers in law should like to work with people and be able to win the respect and confidence of their clients, associates, and the public. Perseverance, creativity, and reasoning ability also are essential to lawyers, who often analyze complex cases and handle new and unique legal problems.

Most beginning lawyers start in salaried positions. Newly hired, salaried attorneys usually start as associates and work with more experienced lawyers or judges. After several years of gaining more responsibilities, some lawyers are admitted to partnership in their firm or go into practice for themselves. Others become full-time law school faculty or administrators; a growing number of these lawyers have advanced degrees in other fields as well.

Some attorneys use their legal training in administrative or managerial positions in various departments of large corporations. A transfer from a corporation's legal department to another department often is viewed as a way to gain administrative experience and rise in the ranks of management.

Job Outlook

Employment of lawyers is expected to grow about as fast as the average through 2010. Continuing demand will result primarily from growth in the population and in the general level of business activities. Demand also will be spurred by growth of legal action in such areas as healthcare, intellectual property, international law, elder law, environmental law, and sexual harassment. In addition, the wider availability and affordability of legal clinics and prepaid legal service programs should result in increased use of legal services by middle-income people.

Demand will be somewhat mitigated because, in an effort to reduce the money spent on legal fees, many businesses increasingly are using large accounting firms and paralegals to perform some of the same functions that lawyers do. For example, accounting firms may provide employee-benefit counseling, process documents, or handle various other services previously performed by the law firm. Also, mediation and dispute resolution increasingly are used as alternatives to litigation.

Competition for job openings should continue to be keen because of the large number of students graduating from law school each year. Graduates with superior academic records from well-regarded law schools will have the best job opportunities. Perhaps as a result of job competition for attorney positions, lawyers are increasingly finding work in nontraditional areas for which legal training is an asset, but not normally a requirement—for example, administrative, managerial, and business positions in banks, insurance firms, real estate companies, government agencies, and other organizations. Employment opportunities are expected to continue to arise in these organizations at a growing rate.

As in the past, some graduates may have to accept positions in areas outside of their field of interest or for which they feel over-qualified. Some recent law school graduates who have been unable to find permanent positions are turning to the growing number of temporary staffing firms that place attorneys in short-term jobs until they are able to secure full-time positions. This service allows companies to hire lawyers on an "as needed" basis and permits beginning lawyers to develop practical skills while looking for permanent positions.

Due to the competition for jobs, a law graduate's geographic mobility and work experience assume greater importance. The willingness to relocate may be an advantage in getting a job but, to be licensed in another State, a lawyer may have to take an additional State bar examination. In addition, employers increasingly seek graduates who have advanced law degrees and experience in a specialty such as tax, patent, or admiralty law.

Employment growth for lawyers will continue to be concentrated in salaried jobs, as businesses and all levels of government employ a growing number of staff attorneys, and as employment in the legal services industry grows in larger law firms. Most salaried positions are in urban areas where government agencies, law firms, and big corporations are concentrated. The number of self-employed lawyers is expected to decrease slowly, reflecting the difficulty of establishing a profitable new practice in the face of competition from larger, established law firms. Moreover, the growing complexity of law, which encourages specialization, along with the cost of maintaining up-to-date legal research materials, favors larger firms.

For lawyers who wish to work independently, establishing a new practice will probably be easiest in small towns and expanding suburban areas. In such communities, competition from larger established law firms is likely to be less keen than in big cities, and new lawyers may find it easier to become known to potential clients.

Some lawyers are adversely affected by cyclical swings in the economy. During recessions, the demand declines for some discretionary legal services, such as planning estates, drafting wills, and handling real estate transactions. Also, corporations are less likely to litigate cases when declining sales and profits result in budgetary restrictions. Some corporations and law firms will not hire new attorneys until business improves and may even cut staff to contain costs. Several factors, however, mitigate the overall impact of recessions on lawyers. During recessions, for example, individuals and corporations face other legal problems, such as bankruptcies, foreclosures, and divorces requiring legal action.

Earnings

In 2000, the median annual earnings of all lawyers was \$88,280. The middle half of the occupation earned between \$60,700 and \$130,170. The lowest paid 10 percent earned less than \$44,590; at least 10 percent earned more than \$145,600. Median annual earnings in the industries employing the largest numbers of lawyers in 2000 are shown below:

Legal services	\$96,610
Federal Government	87,080
Fire, marine, and casualty insurance	82,170
Local government	66,280
State government	64,190

Median salaries of lawyers 6 months after graduation from law school in 2000 varied by type of work, as indicated by table 1.

Salaries of experienced attorneys vary widely according to the type, size, and location of their employer. Lawyers who own their own practices usually earn less than do those who are partners in law firms. Lawyers starting their own practice may need to work part time in other occupations to supplement their income until their practice is well established.

Table 1. Median salaries of lawyers 6 months after graduation, 2000

All graduates	\$51,900
<i>Type of work</i>	
Private practice	80,000
Business/industry	60,000
Academe	40,000
Judicial clerkship and government	40,000
Public interest	34,000

SOURCE: National Association for Law Placement

Most salaried lawyers are provided health and life insurance, and contributions are made on their behalf to retirement plans. Lawyers who practice independently are covered only if they arrange and pay for such benefits themselves.

Related Occupations

Legal training is necessary in many other occupations. Some of these are paralegal and legal assistant; law clerk; title examiner, abstractor, and searcher; arbitrator, mediator, and conciliator; judge, magistrate judge, and magistrate; and administrative law judge, adjudicator, and hearing officer.

Sources of Additional Information

Information on law schools and a career in law may be obtained from:

► American Bar Association, 750 North Lake Shore Dr., Chicago, IL 60611.
Internet: <http://www.abanet.org>

Information on the LSAT, the Law School Data Assembly Service, the law school application process, and the financial aid available for law students may be obtained from:

► Law School Admission Council, P.O. Box 40, Newtown, PA 18940.
Internet: <http://www.lsac.org>

Information on obtaining a job as a lawyer with the Federal Government is available from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000; Federal Relay Service: (800) 877-8339. The first number is not tollfree, and charges may result. Information also is available from the Internet site: <http://www.usajobs.opm.gov>.

The requirements for admission to the bar in a particular State or other jurisdiction also may be obtained at the State capital, from the clerk of the Supreme Court or the administrator of the State Board of Bar Examiners.

Paralegals and Legal Assistants

(O*NET 23-2011.00)

Significant Points

- While some paralegals train on the job, employers increasingly prefer graduates of postsecondary paralegal education programs, especially graduates of 4-year paralegal programs or college graduates who have completed paralegal certificate programs.
- Paralegals are projected to grow faster than average, as they increasingly perform many legal tasks formerly carried out by lawyers.
- Stiff competition is expected, as the number of graduates of paralegal training programs and others seeking to enter the profession outpaces job growth.

Nature of the Work

While lawyers assume ultimate responsibility for legal work, they often delegate many of their tasks to paralegals. In fact, paralegals—also called legal assistants—continue to assume a growing range of tasks in the Nation's legal offices and perform many of the same tasks as lawyers. Nevertheless, they are still explicitly prohibited from carrying out duties which are considered to be the practice of law, such as setting legal fees, giving legal advice, and presenting cases in court.

One of a paralegal's most important tasks is helping lawyers prepare for closings, hearings, trials, and corporate meetings. Paralegals investigate the facts of cases and ensure that all relevant information is considered. They also identify appropriate laws, judicial decisions, legal articles, and other materials that are relevant to assigned cases. After they analyze and organize the information, paralegals may prepare written reports that attorneys use in determining how cases should be handled. Should attorneys decide to file lawsuits on behalf of clients, paralegals may help prepare the legal arguments, draft pleadings and motions to be filed with the court, obtain affidavits, and assist attorneys during trials. Paralegals also organize and track files of all important case documents and make them available and easily accessible to attorneys.

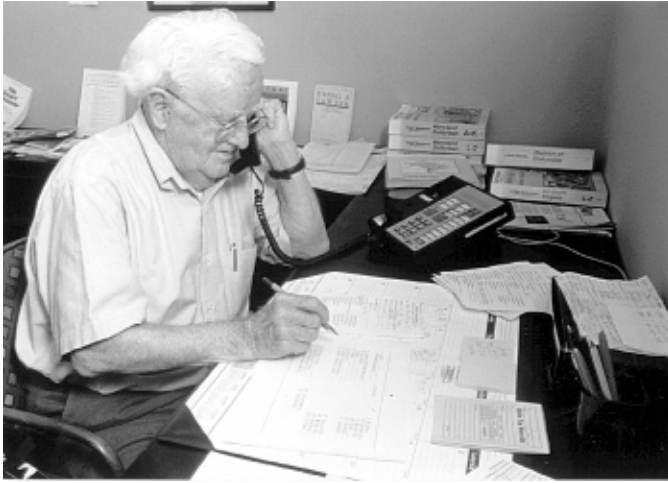
In addition to this preparatory work, paralegals also perform a number of other vital functions. For example, they help draft contracts, mortgages, separation agreements, and trust instruments. They also may assist in preparing tax returns and planning estates. Some paralegals coordinate the activities of other law office employees and maintain financial office records. Various additional tasks may differ, depending on the employer.

Paralegals are found in all types of organizations, but most are employed by law firms, corporate legal departments, and various government offices. In these organizations, they may work in all areas of the law, including litigation, personal injury, corporate law, criminal law, employee benefits, intellectual property, labor law, bankruptcy, immigration, family law, and real estate. Within specialties, functions often are broken down further so that paralegals may deal with a specific area. For example, paralegals specializing in labor law may deal exclusively with employee benefits.

The duties of paralegals also differ widely based on the type of organization in which they are employed. Paralegals who work for corporations often assist attorneys with employee contracts, shareholder agreements, stock-option plans, and employee benefit plans. They also may help prepare and file annual financial reports, maintain corporate minute books and resolutions, and secure loans for the corporation. Paralegals often monitor and review government regulations to ensure that the corporation operates within the law.

The duties of paralegals who work in the public sector usually vary within each agency. In general, they analyze legal material for internal use, maintain reference files, conduct research for attorneys, and collect and analyze evidence for agency hearings. They may then prepare informative or explanatory material on laws, agency regulations, and agency policy for general use by the agency and the public. Paralegals employed in community legal-service projects help the poor, the aged, and others in need of legal assistance. They file forms, conduct research, prepare documents, and when authorized by law, may represent clients at administrative hearings.

Paralegals in small and medium-sized law firms usually perform a variety of duties that require a general knowledge of the law. For example, they may research judicial decisions on improper police arrests or help prepare a mortgage contract. Paralegals employed by large law firms, government agencies, and corporations, however, are more likely to specialize in one aspect of the law.



Paralegals investigate the facts of a case and organize the information that lawyers use to determine how the case should be handled.

Computer use and technical knowledge has become essential to paralegal work.. Computer software packages and the Internet are increasingly used to search legal literature stored in computer databases and on CD-ROM. In litigation involving many supporting documents, paralegals may use computer databases to retrieve, organize, and index various materials. Imaging software allows paralegals to scan documents directly into a database, while billing programs help them to track hours billed to clients. Computer software packages also may be used to perform tax computations and explore the consequences of possible tax strategies for clients.

Working Conditions

Paralegals employed by corporations and government usually work a standard 40-hour week. Although most paralegals work year round, some are temporarily employed during busy times of the year, then released when the workload diminishes. Paralegals who work for law firms sometimes work very long hours when they are under pressure to meet deadlines. Some law firms reward such loyalty with bonuses and additional time off.

These workers handle many routine assignments, particularly when they are inexperienced. As they gain experience, paralegals usually assume more varied tasks with additional responsibility. Paralegals do most of their work at desks in offices and law libraries. Occasionally, they travel to gather information and perform other duties.

Employment

Paralegals and legal assistants held about 188,000 jobs in 2000. Private law firms employed the vast majority; most of the remainder worked for corporate legal departments and various levels of government. Within the Federal Government, the U.S. Department of Justice is the largest employer, followed by the U.S. Departments of Treasury and Defense, and the Federal Deposit Insurance Corporation. Other employers include State and local governments, publicly funded legal-service centers, banks, real estate development companies, and insurance companies. A small number of paralegals own their own businesses and work as freelance legal assistants, contracting their services to attorneys or corporate legal departments.

Training, Other Qualifications, and Advancement

There are several ways to become a paralegal. Employers usually require formal paralegal training obtained through associate or bachelor's degree programs or through a certification program. Increasingly, employers prefer graduates of 4-year paralegal programs or college graduates who have completed paralegal certificate programs. Some employers prefer to train paralegals on the job, hiring college graduates with no legal experience or promoting experienced legal secretaries. Other entrants have experience in a technical field that is useful to law firms, such as a background in tax preparation for tax and estate practice, or nursing or health administration for personal injury practice.

Over 800 formal paralegal training programs are offered by 4-year colleges and universities, law schools, community and junior colleges, business schools, and proprietary schools. There are currently 247 programs approved by the American Bar Association (ABA). Although this approval is neither required nor sought by many programs, graduation from an ABA-approved program can enhance one's employment opportunities. The requirements for admission to these programs vary. Some require certain college courses or a bachelor's degree; others accept high school graduates or those with legal experience; and a few schools require standardized tests and personal interviews.

Paralegal programs include 2-year associate's degree programs, 4-year bachelor's degree programs, and certificate programs that take only a few months to complete. Many certificate programs only require a high school diploma or GED for admission, but they usually are designed for students who already hold an associate or baccalaureate degree. Programs typically include courses on law and legal research techniques, in addition to courses covering specialized areas of law, such as real estate, estate planning and probate, litigation, family law, contracts, and criminal law. Many employers prefer applicants with specialized training.

The quality of paralegal training programs varies; the better programs usually include job placement. Programs increasingly include courses introducing students to the legal applications of computers. Many paralegal training programs include an internship in which students gain practical experience by working for several months in a private law firm, office of a public defender or attorney general, bank, corporate legal department, legal-aid organization, or government agency. Experience gained in internships is an asset when seeking a job after graduation. Prospective students should examine the experiences of recent graduates before enrolling in those programs.

Although most employers do not require certification, earning a voluntary certificate from a professional society may offer advantages in the labor market. The National Association of Legal Assistants, for example, has established standards for certification requiring various combinations of education and experience. Paralegals who meet these standards are eligible to take a 2-day examination, given three times each year at several regional testing centers. Those who pass this examination may use the designation Certified Legal Assistant (CLA). In addition, the Paralegal Advanced Competency Exam, established in 1996 and administered through the National Federation of Paralegal Associations, offers professional recognition to paralegals with a bachelor's degree and at least 2 years of experience. Those who pass this examination may use the designation Registered Paralegal (RP).

Paralegals must be able to document and present their findings and opinions to their supervising attorney. They need to understand legal terminology and have good research and investigative skills. Familiarity with the operation and applications of computers in legal research and litigation support also is increasingly important. Paralegals should stay informed of new developments

in the laws that affect their area of practice. Participation in continuing legal education seminars allows paralegals to maintain and expand their legal knowledge.

Because paralegals frequently deal with the public, they should be courteous and uphold the ethical standards of the legal profession. The National Association of Legal Assistants, the National Federation of Paralegal Associations, and a few States have established ethical guidelines for paralegals to follow.

Paralegals usually are given more responsibilities and less supervision as they gain work experience. Experienced paralegals who work in large law firms, corporate legal departments, and government agencies may supervise and delegate assignments to other paralegals and clerical staff. Advancement opportunities also include promotion to managerial and other law-related positions within the firm or corporate legal department. However, some paralegals find it easier to move to another law firm when seeking increased responsibility or advancement.

Job Outlook

Paralegals and legal assistants are projected to grow faster than the average for all occupations through 2010. Employment growth stems from law firms and other employers with legal staffs increasingly hiring paralegals to lower the cost and increase the availability and efficiency of legal services. The majority of job openings for paralegals in the future will be new jobs created by rapid employment growth, but additional job openings will arise as people leave the occupation. Despite projections of fast employment growth, stiff competition for jobs should continue as the number of graduates of paralegal training programs and others seeking to enter the profession outpaces job growth.

Private law firms will continue to be the largest employers of paralegals, but a growing array of other organizations, such as corporate legal departments, insurance companies, real estate and title insurance firms, and banks will also continue to hire paralegals. Demand for paralegals is expected to grow as an increasing population requires additional legal services, especially in areas such as intellectual property, healthcare, international, elder, sexual harassment, and environmental law. The growth of prepaid legal plans also should contribute to the demand for legal services. Paralegal employment is expected to increase as organizations presently employing paralegals assign them a growing range of tasks, and as paralegals are increasingly employed in small and medium-sized establishments. A growing number of experienced paralegals are expected to establish their own businesses.

Job opportunities for paralegals will expand in the public sector as well. Community legal-service programs, which provide assistance to the poor, aged, minorities, and middle-income families, will employ additional paralegals to minimize expenses and serve the most people. Federal, State, and local government agencies, consumer organizations, and the courts also should continue to hire paralegals in increasing numbers.

To a limited extent, paralegal jobs are affected by the business cycle. During recessions, demand declines for some discretionary legal services, such as planning estates, drafting wills, and handling real estate transactions. Corporations are less inclined to initiate litigation when falling sales and profits lead to fiscal belt tightening. As a result, full-time paralegals employed in offices adversely affected by a recession may be laid off or have their work hours reduced. On the other hand, during recessions, corporations and individuals are more likely to face other problems that require legal assistance, such as bankruptcies, foreclosures, and divorces. Paralegals, who provide many of the same legal services as lawyers at a lower cost, tend to fare relatively better in difficult economic conditions.

Earnings

Earnings of paralegals and legal assistants vary greatly. Salaries depend on education, training, experience, type and size of employer, and geographic location of the job. In general, paralegals who work for large law firms or in large metropolitan areas earn more than those who work for smaller firms or in less populated regions. In 2000, full-time, wage and salary paralegals and legal assistants had median annual earnings of \$35,360. The middle 50 percent earned between \$28,700 and \$45,010. The top 10 percent earned more than \$56,060, while the bottom 10 percent earned less than \$23,350. Median annual earnings in the industries employing the largest numbers of paralegals in 2000 were as follows:

Federal Government	\$48,560
Legal services	34,230
Local government	34,120
State government	32,680

According to the National Association of Legal Assistants, paralegals had an average salary of \$38,000 in 2000. In addition to a salary, many paralegals received a bonus, which averaged about \$2,400. According to the National Federation of Paralegal Associations, starting salaries of paralegals with 1 year or less experience averaged \$38,100 in 1999.

Related Occupations

Several other occupations call for a specialized understanding of the law and the legal system, but do not require the extensive training of a lawyer. These include law clerks; title examiners, abstractors, and searchers; claims adjusters, appraisers, examiners, and investigators; and occupational health and safety specialists and technicians.

Sources of Additional Information

General information on a career as a paralegal can be obtained from:
➤ Standing Committee on Legal Assistants, American Bar Association, 541 North Fairbanks Court, Chicago, IL 60611. Internet: <http://www.abanet.org>

For information on the Certified Legal Assistant exam, schools that offer training programs in a specific State, and standards and guidelines for paralegals, contact:

➤ National Association of Legal Assistants, Inc., 1516 South Boston St., Suite 200, Tulsa, OK 74119. Internet: <http://www.aafpe.org>

Information on a career as a paralegal, schools that offer training programs, job postings for paralegals, the Paralegal Advanced Competency Exam, and local paralegal associations can be obtained from:

➤ National Federation of Paralegal Associations, P.O. Box 33108, Kansas City, MO 64114. Internet: <http://www.paralegals.org>

Information on paralegal training programs, including the pamphlet “How to Choose a Paralegal Education Program,” may be obtained from:

➤ American Association for Paralegal Education, 2965 Flowers Road South, Atlanta, GA 30341. Internet: <http://www.aafpe.org>

Information on obtaining a position as a paralegal specialist with the Federal Government is available from the Office of Personnel Management (OPM) through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000; Federal Relay Service: (800) 877-8339. The first number is not tollfree, and charges may result. Information also is available from the OPM Internet site: <http://www.usajobs.opm.gov>.

Psychologists

(O*NET 19-3031.01, 19-3031.02, 19-3031.03, 19-3032.00)

Significant Points

- More than 4 out of 10 psychologists are self-employed, about 6 times the average for professional workers.
- A doctoral degree usually is required for employment as a licensed clinical or counseling psychologist.
- Opportunities for employment in psychology for those with only a bachelor's degree are extremely limited.

Nature of the Work

Psychologists study the human mind and human behavior. Research psychologists investigate the physical, cognitive, emotional, or social aspects of human behavior. Psychologists in applied fields provide mental health care in hospitals, clinics, schools, or private settings.

Like other social scientists, psychologists formulate hypotheses and collect data to test their validity. Research methods vary depending on the topic under study. Psychologists sometimes gather information through controlled laboratory experiments or by administering personality, performance, aptitude, and intelligence tests. Other methods include observation, interviews, questionnaires, clinical studies, and surveys.

Psychologists apply their knowledge to a wide range of endeavors, including health and human services, management, education, law, and sports. In addition to a variety of work settings, psychologists usually specialize in one of a number of different areas.

Clinical psychologists—who constitute the largest specialty—usually work in counseling centers, independent or group practices, hospitals, or clinics. They help mentally and emotionally disturbed clients adjust to life and may help medical and surgical patients deal with illnesses or injuries. Some work in physical rehabilitation settings, treating patients with spinal cord injuries, chronic pain or illness, stroke, arthritis, and neurologic conditions. Others help people deal with times of personal crisis, such as divorce or the death of a loved one.

Clinical psychologists often interview patients and give diagnostic tests. They may provide individual, family, or group psychotherapy, and design and implement behavior modification programs. Some clinical psychologists collaborate with physicians and other specialists to develop and implement treatment and intervention programs that patients can understand and comply with. Other clinical psychologists work in universities and medical schools, where they train graduate students in the delivery of mental health and behavioral medicine services. Some administer community mental health programs.

Areas of specialization within clinical psychology include health psychology, neuropsychology, and geropsychology. *Health psychologists* promote good health through health maintenance counseling programs designed to help people achieve goals such as to stop smoking or lose weight. *Neuropsychologists* study the relation between the brain and behavior. They often work in stroke and head injury programs. *Geropsychologists* deal with the special problems faced by the elderly. The emergence and growth of these specialties reflects the increasing participation of psychologists in providing direct services to special patient populations.

Counseling psychologists use various techniques, including interviewing and testing, to advise people on how to deal with problems of everyday living. They work in settings such as university



A psychologist's specialty and place of employment determine working conditions.

counseling centers, hospitals, and individual or group practices. (Also see the statements on counselors and social workers elsewhere in the *Handbook*.)

School psychologists work in elementary and secondary schools or school district offices to resolve students' learning and behavior problems. They collaborate with teachers, parents, and school personnel to improve classroom management strategies or parenting skills, counter substance abuse, work with students with disabilities or gifted and talented students, and improve teaching and learning strategies. They may evaluate the effectiveness of academic programs, behavior management procedures, and other services provided in the school setting.

Industrial-organizational (I/O) psychologists apply psychological principles and research methods to the workplace in the interest of improving productivity and the quality of worklife. They also are involved in research on management and marketing problems. They conduct applicant screening, training and development, counseling, and organizational development and analysis. An industrial psychologist might work with management to reorganize the work setting to improve productivity or quality of life in the workplace. They frequently act as consultants, brought in by management in order to solve a particular problem.

Developmental psychologists study the physiological, cognitive, and social development that takes place throughout life. Some specialize in behavior during infancy, childhood, and adolescence, or changes that occur during maturity or old age. They also may study developmental disabilities and their effects. Increasingly, research is developing ways to help elderly people stay as independent as possible.

Social psychologists examine people's interactions with others and with the social environment. They work in organizational consultation, marketing research, systems design, or other applied psychology fields. Prominent areas of study include group behavior, leadership, attitudes, and perception.

Experimental or research psychologists work in university and private research centers and in business, nonprofit, and governmental organizations. They study behavior processes with human beings and animals such as rats, monkeys, and pigeons. Prominent areas of study in experimental research include motivation, thinking, attention, learning and memory, sensory and perceptual processes, effects of substance abuse, and genetic and neurological factors affecting behavior.

Working Conditions

A psychologist's specialty and place of employment determine working conditions. Clinical, school, and counseling psychologists in private practice have their own offices and set their own hours. However, they often offer evening and weekend hours to accommodate their clients. Those employed in hospitals, nursing homes, and other health facilities may work shifts including evenings and weekends, while those who work in schools and clinics generally work regular hours.

Psychologists employed as faculty by colleges and universities divide their time between teaching and research and also may have administrative responsibilities. Many have part-time consulting practices. Most psychologists in government and industry have structured schedules.

Increasingly, many work as part of a team and consult with other psychologists and professionals. Many psychologists experience pressures due to deadlines, tight schedules, and overtime work. Their routine may be interrupted frequently. Travel usually is required to attend conferences or conduct research.

Employment

Psychologists held about 182,000 jobs in 2000. Educational institutions employed about 4 out of 10 salaried psychologists in positions other than teaching, such as counseling, testing, research, and administration. Three out of 10 were employed in health services, primarily in hospitals, mental health clinics, rehabilitation centers, nursing homes, and other health facilities. Government agencies at the Federal, State, and local levels employed more than 1 in 10 in hospitals, clinics, correctional facilities, and other settings. The U.S. Departments of Veterans Affairs and of Defense employ a majority of the psychologists working for Federal agencies. Some psychologists work in social service organizations, research organizations, management consulting firms, marketing research firms, and other businesses.

After several years of experience, some psychologists—usually those with doctoral degrees—enter private practice or set up private research or consulting firms. More than 4 out of 10 psychologists were self-employed.

In addition to the jobs described above, many psychologists held faculty positions at colleges and universities, and as high school psychology teachers. (See the statements on teachers—postsecondary and teachers—preschool, kindergarten, elementary, middle, and secondary elsewhere in the *Handbook*.)

Training, Other Qualifications, and Advancement

A doctoral degree is usually required for employment as a licensed clinical or counseling psychologist. Psychologists with a Ph.D. qualify for a wide range of teaching, research, clinical, and counseling positions in universities, healthcare services, elementary and secondary schools, private industry, and government. Psychologists with a Doctor of Psychology (Psy.D.) degree usually work in clinical positions or in private practices. An Educational Specialist (Ed.S.) degree will qualify an individual to work as a school psychologist. Persons with a master's degree in psychology may work as industrial-organizational psychologists. They also may work as psychological assistants, under the supervision of doctoral-level psychologists, and conduct research or psychological evaluations. A bachelor's degree in psychology qualifies a person to assist psychologists and other professionals in community mental health centers, vocational rehabilitation offices, and correctional programs. They may work as research or administrative assistants or become sales or management trainees in business. Some work as technicians in related fields such as marketing research.

Clinical psychologists usually must have completed the Ph.D. or Psy.D. requirements and served an internship. Vocational and guidance counselors usually need 2 years of graduate study in counseling and 1 year of counseling experience. School psychology requires a master's degree followed by a 1-year internship.

In the Federal Government, candidates having at least 24 semester hours in psychology and one course in statistics qualify for entry-level positions. However, competition for these jobs is keen because this is one of the few areas in which one can work as a psychologist without an advanced degree.

A doctoral degree usually requires 5 to 7 years of graduate study. The Ph.D. degree culminates in a dissertation based on original research. Courses in quantitative research methods, which include the use of computer-based analysis, are an integral part of graduate study and are necessary to complete the dissertation. The Psy.D. may be based on practical work and examinations rather than a dissertation. In clinical or counseling psychology, the requirements for the doctoral degree usually include at least a 1-year internship.

A master's degree in psychology requires at least 2 years of full-time graduate study. Requirements usually include practical experience in an applied setting and a master's thesis based on an original research project. Competition for admission into graduate programs is keen. Some universities require an undergraduate major in psychology. Others prefer only course work in basic psychology with courses in the biological, physical, and social sciences; and statistics and mathematics.

Psychologists in independent practice or those who offer any type of patient care—including clinical, counseling, and school psychologists—must meet certification or licensing requirements in all States and the District of Columbia. Licensing laws vary by State and by type of position and require licensed or certified psychologists to limit their practice to areas in which they have developed professional competence through training and experience. Clinical and counseling psychologists usually require a doctorate in psychology, completion of an approved internship, and 1 to 2 years of professional experience. In addition, all States require that applicants pass an examination. Most State boards administer a standardized test and many supplement that with additional oral or essay questions. Most States certify those with a master's degree as school psychologists after completion of an internship. Some States require continuing education for license renewal.

The American Psychological Association (APA) presently accredits doctoral training programs in clinical, counseling, and school psychology. The National Council for Accreditation of Teacher Education, with the assistance of the National Association of School Psychologists, also is involved in the accreditation of advanced degree programs in school psychology. The APA also accredits institutions that provide internships for doctoral students in school, clinical, and counseling psychology.

The American Board of Professional Psychology (ABPP) recognizes professional achievement by awarding certification, primarily in clinical psychology, clinical neuropsychology, counseling, forensic, industrial-organizational, and school psychology. Candidates for ABPP certification need a doctorate in psychology, 5 years of experience, professional endorsements, and a passing grade on an examination.

Aspiring psychologists who are interested in direct patient care must be emotionally stable, mature, and able to deal effectively with people. Sensitivity, compassion, and the ability to lead and inspire others are particularly important qualities for clinical work and counseling. Research psychologists should be able to do detailed work independently and as part of a team. Excellent communications skills are necessary to succeed in research. Patience and perseverance are vital qualities because results from

psychological treatment of patients or from research usually take a long time.

Job Outlook

Employment of psychologists is expected to grow about as fast as the average for all occupations through 2010. Employment in healthcare will grow fastest in outpatient mental health and substance abuse treatment clinics. Numerous job opportunities will also arise in schools, public and private social service agencies, and management consulting services. Companies will use psychologists' expertise in survey design, analysis, and research to provide marketing evaluation and statistical analysis. The increase in employee assistance programs, which offer employees help with personal problems, also should spur job growth.

Opportunities for people holding doctorates from leading universities in areas with an applied emphasis, such as counseling, health, and educational psychology, should be good. Psychologists with extensive training in quantitative research methods and computer science may have a competitive edge over applicants without this background.

Graduates with a master's degree in psychology qualify for positions in school and industrial-organizational psychology. Graduates of master's degree programs in school psychology should have the best job prospects, as schools are expected to increase student counseling and mental health services. Masters' degree holders with several years of business and industry experience can obtain jobs in consulting and marketing research. Other master's degree holders may find jobs as psychological assistants or counselors providing mental health services under the direct supervision of a licensed psychologist. Still others may find jobs involving research and data collection and analysis in universities, government, or private companies.

Very few opportunities directly related to psychology will exist for bachelor's degree holders. Some may find jobs as assistants in rehabilitation centers, or in other jobs involving data collection and analysis. Those who meet State certification requirements may become high school psychology teachers.

Earnings

Median annual earnings of salaried psychologists were \$48,596 in 2000. Median annual earnings were \$48,320 for clinical, counseling, and school psychologists and \$66,880 for industrial-organizational psychologists. Median annual earnings in the industries employing the largest numbers of psychologists in 2000 were as follows:

Hospitals	\$52,460
Elementary and secondary schools	51,310
Offices of other health practitioners	50,990
Offices and clinics of medical doctors	47,890
Individual and family services	35,720

The Federal Government recognizes education and experience in certifying applicants for entry-level positions. In general, the starting salary for psychologists having a bachelor's degree was about \$21,900 in 2001; those with superior academic records could begin at \$27,200. Psychologists with a master's degree and 1 year of experience could start at \$33,300. Psychologists having a Ph.D. or Psy.D. degree and 1 year of internship could start at \$40,200, and some individuals with experience could start at \$48,200. Beginning salaries were slightly higher in selected areas of the country where the prevailing local pay level was higher. The average annual salary for psychologists in the Federal Government was \$72,830 in 2001.

Related Occupations

Psychologists are trained to conduct research and teach, evaluate, counsel, and advise individuals and groups with special needs. Others who do this kind of work include clergy, counselors, physicians and surgeons, social workers, sociologists, and special education teachers.

Sources of Additional Information

For information on careers, educational requirements, financial assistance, and licensing in all fields of psychology, contact:

► American Psychological Association, Research Office and Education in Psychology and Accreditation Offices, 750 1st St. NE., Washington, DC 20002. Internet: <http://www.apa.org>

For information on careers, educational requirements, certification, and licensing of school psychologists, contact:

► National Association of School Psychologists, 4030 East West Hwy., Suite 402, Bethesda, MD 20814. Internet: <http://www.nasponline.org>

Information about State licensing requirements is available from:

► Association of State and Provincial Psychology Boards, P.O. Box 241245, Montgomery, AL 36124-1245. Internet: <http://www.asppb.org>

Information on obtaining a position as a psychologist with the Federal Government is available from the Office of Personnel Management through a telephone-based system. Consult your telephone directory under U.S. Government for a local number or call (912) 757-3000; Federal Relay Service: (800) 877-8339. The first number is not tollfree, and charges may result. Information also is available from the Internet site: <http://www.usajobs.opm.gov>.

Social Scientists, Other

(O*NET 19-3041.00, 19-3091.01, 19-3091.02, 19-3092.00, 19-3093.00, 19-3094.00)

Significant Points

- Educational attainment of social scientists is among the highest of all occupations.
- Job opportunities are expected to be best in social service agencies, research and testing services, and management consulting firms.

Nature of the Work

The major social science occupations covered in this statement include anthropologists, archaeologists, geographers, historians, political scientists, and sociologists. (Economists, psychologists, and urban and regional planners are covered elsewhere in the *Handbook*.)

Social scientists study all aspects of society—from past events and achievements to human behavior and relationships between groups. Their research provides insights that help us understand different ways in which individuals and groups make decisions, exercise power, and respond to change. Through their studies and analyses, social scientists suggest solutions to social, business, personal, governmental, and environmental problems.

Research is a major activity for many social scientists. They use various methods to assemble facts and construct theories. Applied research usually is designed to produce information that will enable people to make better decisions or manage their affairs more effectively. Interviews and surveys are widely used to collect facts, opinions, or other information. Information collection takes many forms including living and working among the population being studied; field investigations, the analysis of historical records and documents; experiments with human or animal subjects in a laboratory; administration of standardized tests and questionnaires; and

preparation and interpretation of maps and computer graphics. The work of the major specialties in social science—other than psychologists, economists, and urban and regional planners—varies greatly, although, specialists in one field may find that their research overlaps work being conducted in another discipline.

Anthropologists study the origin and the physical, social, and cultural development and behavior of humans. They may study the way of life, archaeological remains, language, or physical characteristics of people in various parts of the world. Some compare the customs, values, and social patterns of different cultures. Anthropologists usually concentrate in sociocultural anthropology, archaeology, linguistics, or biological-physical anthropology. Sociocultural anthropologists study customs, cultures, and social lives of groups in settings that vary from unindustrialized societies to modern urban centers.

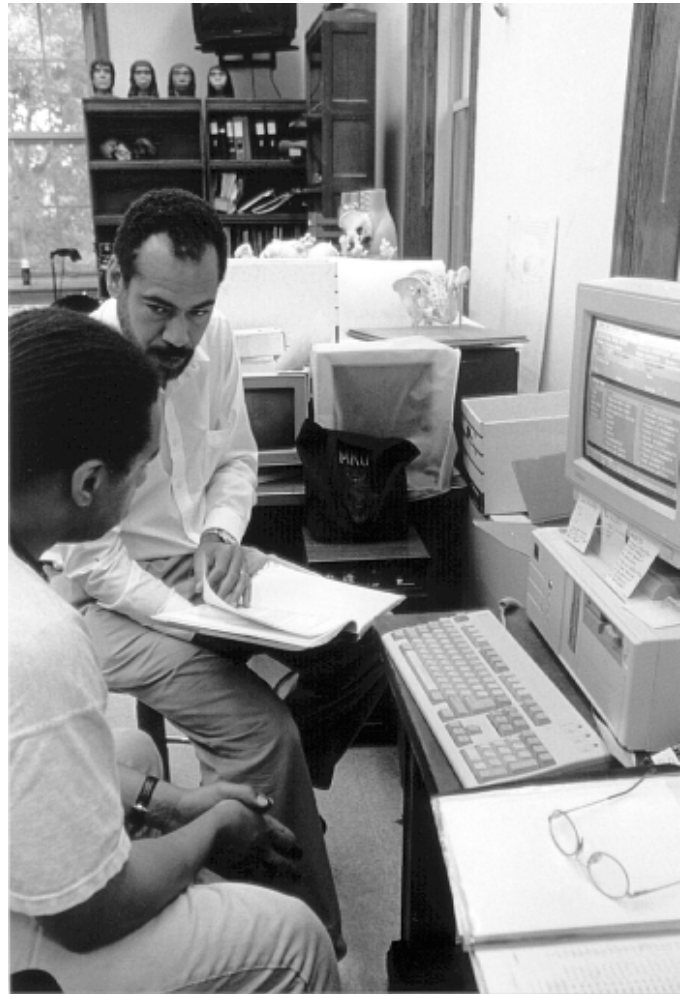
Archaeologists recover and examine material evidence, such as ruins, tools, and pottery remaining from past human cultures in order to determine the history, customs, and living habits of earlier civilizations. Linguistic anthropologists study the role and changes over time of language in various cultures. Biological-physical anthropologists study the evolution of the human body, look for the earliest evidences of human life, and analyze how culture and biology influence one another. Most anthropologists specialize in one particular region of the world.

Geographers analyze distributions of physical and cultural phenomena on local, regional, continental, and global scales. Economic geographers study the distribution of resources and economic activities. Political geographers are concerned with the relationship of geography to political phenomena, whereas cultural geographers study the geography of cultural phenomena. Physical geographers study variations in climate, vegetation, soil, and landforms, and their implications for human activity. Urban and transportation geographers study cities and metropolitan areas, while regional geographers study the physical, economic, political, and cultural characteristics of regions, ranging in size from a congressional district to entire continents. Medical geographers study health care delivery systems, epidemiology (the study of the causes and control of epidemics), and the effect of the environment on health. (Some occupational classification systems include geographers under physical scientists rather than social scientists.)

Historians research, analyze, and interpret the past. They use many sources of information in their research, including government and institutional records, newspapers and other periodicals, photographs, interviews, films, and unpublished manuscripts such as personal diaries and letters. Historians usually specialize in a country or region; a particular time period; or a particular field, such as social, intellectual, cultural, political, or diplomatic history. Biographers collect detailed information on individuals. Other historians help study and preserve archival materials, artifacts, and historical buildings and sites.

Political scientists study the origin, development, and operation of political systems and public policy. They conduct research on a wide range of subjects such as relations between the United States and other countries, the institutions and political life of nations, the politics of small towns or a major metropolis, or the decisions of the U.S. Supreme Court. Studying topics such as public opinion, political decision-making, ideology, and public policy, they analyze the structure and operation of governments as well as various political entities. Depending on the topic, a political scientist might conduct a public opinion survey, analyze election results, analyze public documents, or interview public officials.

Sociologists study society and social behavior by examining the groups and social institutions people form, as well as various social, religious, political, and business organizations. They also study



Research is a major activity for many social scientists.

the behavior and interaction of groups, trace their origin and growth, and analyze the influence of group activities on individual members. They are concerned with the characteristics of social groups, organizations, and institutions; the ways individuals are affected by each other and by the groups to which they belong; and the effect of social traits such as sex, age, or race on a person's daily life. The results of sociological research aid educators, lawmakers, administrators, and others interested in resolving social problems and formulating public policy.

Most sociologists work in one or more specialties, such as social organization, stratification, and mobility; racial and ethnic relations; education; family; social psychology; urban, rural, political, and comparative sociology; sex roles and relations; demography; gerontology; criminology; or sociological practice.

Working Conditions

Most social scientists have regular hours. Generally working behind a desk, either alone or in collaboration with other social scientists, they read and write research reports. Many experience the pressures of writing and publishing articles, deadlines and tight schedules, and sometimes they must work overtime, for which they usually are not reimbursed. Social scientists often work as an integral part of a research team, where good communications skills are important. Travel may be necessary to collect information or attend meetings. Social scientists on foreign assignment must adjust to unfamiliar cultures, climates, and languages.

Some social scientists do fieldwork. For example, anthropologists, archaeologists, and geographers may travel to remote areas, live among the people they study, learn their languages, and stay for long periods at the site of their investigations. They may work under rugged conditions, and their work may involve strenuous physical exertion.

Social scientists employed by colleges and universities usually have flexible work schedules, often dividing their time among teaching, research and writing, consulting, or administrative responsibilities.

Employment

Social scientists held about 15,000 jobs in 2000. Many worked as researchers, administrators, and counselors for a wide range of employers, including Federal, State, and local governments, educational institutions, social service agencies, research and testing services, and management consulting firms. Other employers include international organizations, associations, museums, and historical societies.

Many additional individuals with training in a social science discipline teach in colleges and universities, and in secondary and elementary schools. (For more information, see teachers—postsecondary and teachers—preschool, kindergarten, elementary, middle, and secondary elsewhere in the *Handbook*.) The proportion of social scientists that teach varies by specialty—for example, the academic world usually is a more important source of jobs for graduates in history than for graduates in the other fields of study.

Training, Other Qualifications, and Advancement

Educational attainment of social scientists is among the highest of all occupations. The Ph.D. or equivalent degree is a minimum requirement for most positions in colleges and universities and is important for advancement to many top-level nonacademic research and administrative posts. Graduates with master's degrees in applied specialties usually have better professional opportunities outside of colleges and universities, although the situation varies by field. Graduates with a master's degree in a social science may qualify for teaching positions in community colleges. Bachelor's degree holders have limited opportunities and in most social science occupations do not qualify for "professional" positions. The bachelor's degree does, however, provide a suitable background for many different kinds of entry-level jobs, such as research assistant, administrative aide, or management or sales trainee. With the addition of sufficient education courses, social science graduates also can qualify for teaching positions in secondary and elementary schools.

Training in statistics and mathematics is essential for many social scientists. Mathematical and quantitative research methods increasingly are used in geography, political science, and other fields. The ability to use computers for research purposes is mandatory in most disciplines.

Depending on their jobs, social scientists may need a wide range of personal characteristics. Because they constantly seek new information about people, things, and ideas, intellectual curiosity and creativity are fundamental personal traits. The ability to think logically and methodically is important to a political scientist comparing, for example, the merits of various forms of government. Objectivity, open-mindedness, and systematic work habits are important in all kinds of social science research. Perseverance is essential for an anthropologist, who might spend years accumulating artifacts from an ancient civilization. Excellent written and oral communication skills are essential for all these professionals.

Job Outlook

Overall employment of social scientists is expected to grow about as fast as the average for all occupations through 2010. Prospects

are best for those with advanced degrees, and usually are better in disciplines such as sociology, anthropology, and archaeology, which offer more opportunities in nonacademic settings.

Government agencies, social service organizations, marketing, research and consulting firms, and a wide range of businesses seek social science graduates, although often in jobs with titles unrelated to their academic discipline. Social scientists will face stiff competition for academic positions. However, the growing importance and popularity of social science subjects in secondary schools is strengthening the demand for social science teachers at that level.

Candidates seeking positions as social scientists can expect to encounter competition in many areas of social science. Some social science graduates, however, will find good employment opportunities in areas outside traditional social science, often in related jobs that require good research, communication, and quantitative skills.

Earnings

Median annual earnings of all other social scientists (excluding economists, psychologists, and urban and regional planners) were \$48,330 in 2000. Anthropologists and archeologists had median annual earnings of \$36,040; geographers, \$46,690; historians, \$39,860; political scientists, \$81,040; and sociologists, \$45,670.

In the Federal Government, social scientists with a bachelor's degree and no experience could start at \$21,900 or \$27,200 a year in 2001, depending on their college records. Those with a master's degree could start at \$33,300, and those with a Ph.D. degree could begin at \$40,200, while some individuals with experience and an advanced degree could start at \$48,200. Beginning salaries were slightly higher in selected areas of the country where the prevailing local pay level was higher.

Related Occupations

A number of occupations requiring training and personal qualities similar to those of social scientists are covered elsewhere in the *Handbook*. These include computer programmers; computer software engineers; counselors; lawyers; mathematicians; news analysts, reporters, and correspondents; postsecondary teachers; social workers; statisticians; and systems analysts.

Sources of Additional Information

Detailed information about economists and market and survey researchers, psychologists, and urban and regional planners is presented elsewhere in the *Handbook*.

For information about careers in anthropology, contact:

- The American Anthropological Association, 4350 N. Fairfax Dr., Suite 640, Arlington, VA 22203-1620. Internet: <http://www.aaanet.org>

For information about careers in archaeology, contact:

- Society for American Archaeology, 900 2nd St. NE., Suite 12, Washington, DC 20002-3557. Internet: <http://www.saa.org>
- Archaeological Institute of America, 656 Beacon St., Boston, MA 02215-2006. Internet: <http://www.archaeological.org>

For information about careers in geography, contact:

- Association of American Geographers, 1710 16th St. NW., Washington, DC 20009-3198. Internet: <http://www.aag.org>

Information on careers for historians is available from:

- American Historical Association, 400 A St. SE., Washington, DC 20003-3889. Internet: <http://www.theaha.org>
- Organization of American Historians, 112 North Bryan Ave., Bloomington, IN 47408-4199. Internet: <http://www.oah.org>
- American Association for State and Local History, 1717 Church St., Nashville, TN 37203-2991. Internet: <http://www.aaslh.org>

For information about careers in political science, contact:

- National Association of Schools of Public Affairs and Administration, 1120 G St. NW., Suite 730, Washington, DC 20005-3869. Internet: <http://www.nasppaa.org>

Information about careers in sociology is available from:

► American Sociological Association, 1307 New York Ave. NW., Suite 700, Washington, DC 20005-4712. Internet: <http://www.asanet.org>

For information about careers in demography, contact:

► Population Association of America, 8630 Fenton St., Suite 722, Silver Spring, MD 20910-3812. Internet: <http://www.popassoc.org>

Urban and Regional Planners

(O*NET 19-3051.00)

Significant Points

- Most entry-level jobs require a master's degree, although a bachelor's degree and related work experience is sufficient for some positions.
- Most new jobs will arise in more affluent, rapidly growing urban and suburban communities.

Nature of the Work

Planners develop long- and short-term land use plans to provide for growth and revitalization of urban, suburban, and rural communities, while helping local officials make decisions concerning social, economic, and environmental problems. Because local governments employ the majority of urban and regional planners, they often are referred to as community, regional, or city planners.

Planners promote the best use of a community's land and resources for residential, commercial, institutional, and recreational purposes. Planners may be involved in various other activities, including decisions on alternative public transportation system plans, resource development, and protection of ecologically sensitive regions. They address issues such as traffic congestion, air pollution, and the effect of growth and change on a community. They may formulate plans relating to the construction of new school buildings, public housing, or other infrastructure. Some planners are involved in environmental issues ranging from pollution control to wetland preservation, forest conservation, or the location of new landfills. Planners also may be involved with drafting legislation on environmental, social, and economic issues, such as sheltering the homeless, planning a new park, or meeting the demand for new correctional facilities.

Planners examine proposed community facilities such as schools to be sure these facilities will meet the changing demands placed upon them over time. They keep abreast of economic and legal issues involved in zoning codes, building codes, and environmental regulations. They ensure that builders and developers follow these codes and regulations. Planners also deal with land use issues created by population movements. For example, as suburban growth and economic development create more new jobs outside cities, the need for public transportation that enables workers to get to these jobs increases. In response, planners develop transportation models for possible implementation and explain their details to planning boards and the general public.

Before preparing plans for community development, planners report on the current use of land for residential, business, and community purposes. These reports include information on the location and capacity of streets, highways, airports, water and sewer lines, schools, libraries, and cultural and recreational sites. They also provide data on the types of industries in the community, characteristics of the population, and employment and economic trends. With this information, along with input from citizens' advisory committees, planners design the layout of land uses for buildings and other facilities such as subway lines and stations. Planners prepare



Urban and regional planners use computers to record and analyze information and to prepare reports and recommendations.

reports showing how their programs can be carried out and what they will cost.

Planners use computers to record and analyze information and to prepare reports and recommendations for government executives and others. Computer databases, spreadsheets, and analytical techniques are widely used to project program costs and forecast future trends in employment, housing, transportation, or population. Computerized geographic information systems enable planners to map land areas and overlay maps with geographic variables, such as population density, as well as to combine and manipulate geographic information to produce alternative plans for land use or development.

Urban and regional planners often confer with land developers, civic leaders, and public officials. They may function as mediators in community disputes and present alternatives acceptable to opposing parties. Planners may prepare material for community relations programs, speak at civic meetings, and appear before legislative committees and elected officials to explain and defend their proposals.

In large organizations, planners usually specialize in a single area such as transportation, demography, housing, historic preservation, urban design, environmental and regulatory issues, or economic development. In small organizations, planners must be able to do various kinds of planning.

Working Conditions

Urban and regional planners often are required to travel to inspect the features of land under consideration for development or regulation, including its current use and the types of structures on it. Some local government planners involved in site development inspections spend most of their time in the field. Although most planners have a scheduled 40-hour workweek, they frequently attend evening or weekend meetings or public hearings with citizens' groups. Planners may experience the pressure of deadlines and tight work schedules, as well as political pressure generated by interest groups affected by land use proposals.

Employment

Urban and regional planners held about 30,000 jobs in 2000. About 7 out of 10 were employed by local governments. Companies involved with research and testing or management and public relations employ an increasing proportion of planners in the private sector. Others are employed in State agencies dealing with housing,

transportation, or environmental protection, and a small number work for the Federal Government.

Training, Other Qualifications, and Advancement

For jobs as urban and regional planners, employers prefer workers who have advanced training. Most entry-level jobs in Federal, State, and local government agencies require a master's degree in urban or regional planning, urban design, geography, or a similar course of study. A bachelor's degree from an accredited planning program, coupled with a master's degree in architecture, landscape architecture, or civil engineering, is good preparation for entry-level planning jobs in areas such as urban design, transportation, or the environment. A master's degree from an accredited planning program provides the best training for a number of planning fields. Although graduates from one of the limited number of accredited bachelor's degree programs qualify for many entry-level positions, their advancement opportunities often are limited unless they acquire an advanced degree.

Courses in related disciplines such as architecture, law, earth sciences, demography, economics, finance, health administration, geographic information systems, and management are highly recommended. In addition, familiarity with computer models and statistical techniques is necessary.

In 2001, about 80 colleges and universities offered an accredited master's degree program, and about 10 offered an accredited bachelor's degree program in urban or regional planning. These programs are accredited by the Planning Accreditation Board, which consists of representatives of the American Institute of Certified Planners, the American Planning Association, and the Association of Collegiate Schools of Planning. Most graduate programs in planning require a minimum of 2 years.

Specializations most commonly offered by planning schools are environmental planning, land use and comprehensive planning, economic development, housing, historic preservation, and social planning. Other popular offerings include community development, transportation, and urban design. Graduate students spend considerable time in studios, workshops, and laboratory courses learning to analyze and solve planning problems. They often are required to work in a planning office part time or during the summer. Local government planning offices frequently offer students internships, providing experience that proves invaluable in obtaining a full-time planning position after graduation.

The American Institute of Certified Planners (AICP), a professional institute within the American Planning Association (APA), grants certification to individuals who have the appropriate combination of education and professional experience and pass an examination. Certification may be helpful for promotion.

Planners must be able to think in terms of spatial relationships and visualize the effects of their plans and designs. They should be flexible and able to reconcile different viewpoints and to make constructive policy recommendations. The ability to communicate effectively, both orally and in writing, is necessary for anyone interested in this field.

After a few years of experience, planners may advance to assignments requiring a high degree of independent judgment, such as designing the physical layout of a large development or recommend-

ing policy and budget options. Some public sector planners are promoted to community planning director and spend a great deal of time meeting with officials, speaking to civic groups, and supervising a staff. Further advancement occurs through a transfer to a larger jurisdiction with more complex problems and greater responsibilities, or into related occupations, such as director of community or economic development.

Job Outlook

Employment of urban and regional planners is expected to grow about as fast as the average for all occupations through 2010. Employment growth will be driven by the need for State and local governments to provide public services such as regulation of commercial development, the environment, transportation, housing, and land use and development. Nongovernmental initiatives dealing with historic preservation and redevelopment will provide additional openings. Some job openings also will arise from the need to replace experienced planners who transfer to other occupations, retire, or leave the labor force for other reasons.

Most planners work for local governments with limited resources and many demands for services. When communities need to cut expenditures, planning services may be cut before more basic services such as police or education. As a result, the number of openings in private industry for consulting positions is expected to grow more rapidly than the number of openings in government.

Most new jobs for urban and regional planners will arise in more affluent, rapidly expanding communities. Local governments need planners to address an array of problems associated with population growth. For example, new housing developments require roads, sewer systems, fire stations, schools, libraries, and recreation facilities that must be planned while considering budgetary constraints. Small town chambers of commerce, economic development authorities, and tourism bureaus may hire planners, preferring candidates with some background in marketing and public relations.

Earnings

Median annual earnings of urban and regional planners were \$46,500 in 2000. The middle 50 percent earned between \$36,510 and \$57,900. The lowest 10 percent earned less than \$29,890, and the highest 10 percent earned more than \$72,090. Median annual earnings in local government, the industry employing the largest numbers of urban and regional planners, were \$45,300.

Related Occupations

Urban and regional planners develop plans for the growth of urban, suburban, and rural communities. Others whose work is similar include architects, civil engineers, environmental engineers, landscape architects, and geographers.

Sources of Additional Information

Information on careers, salaries, and certification in urban and regional planning is available from:

➤ American Planning Association, Education Division, 122 South Michigan Ave., Suite 1600, Chicago, IL 60603-6107. Internet: <http://www.planning.org>